REMARKS

In the Official Action mailed on **6 September 2006**, the Examiner reviewed claims 1-5, 7-16, 18-27, and 29-33. Claims 1-5, 7-16, 18-27, and 29-33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frey, Jr. et al (USPN 5,201,044, hereinafter "Frey") in view of Fleming (USPN 6,023,772, hereinafter "Fleming").

Rejections under 35 U.S.C. §103(a)

Independent claims 1, 12, and 23 were rejected as being unpatentable over Frey in view of Fleming.

Applicant respectfully submits that the present invention teaches maintaining the log of file operations in the **volatile memory of a secondary server that is separate from the primary server** (see FIG. 1, page 6, line 25 to page 7, line 12, and claim 10 of the instant application). Recovery after a failure of the primary server involves **performing only those file operations in this log file, i.e., only those file operations that are stored in the volatile memory of the second server** (see FIG 4, step 404 of the instant application). This is beneficial because it allows fast recovery of file operations on the secondary server if the primary server fails (specifically without incurring the cost of possibly millions of additional processor cycles that will be needed to complete recovery of file operations in the case that the log file is stored in non-volatile storage) (see page 2, lines 15-17 of the instant application).

Applicant respectfully submits that Frey teaches storing the log of file operations of distributed transactions involving multiple nodes at any one node. In response to Examiner's point that Col 5, lines 4-7 of Frey discloses using the log file to enable reconstruction, Applicant respectfully submits that Frey does not teach enabling such reconstruction using contents of the log file in volatile memory in order to speed the process. In addition, Applicant respectfully submits

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that while Fleming teaches the use of a secondary system for failover recovery, there is nothing within Frey or Fleming, either separately or in concert, which discloses recovery using only the file operations that are stored in the volatile memory of a node in order to recover without having the delay and processor cycle cost that will occur if this is not explicitly enforced.

Accordingly, Applicant has amended independent claims 1, 12, and 23 to clarify that the present invention teaches recovery after failure by replaying only those file operations that are logged in the volatile memory. These amendments find support in FIG. 4, step 404 of the specification. Applicant has also canceled claims 4, 15, and 26. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 12, and 23 as presently amended are in condition for allowance. Applicant also submits that claims 2-3, 5, and 7-11, which depend upon claim 1, claims 13-14, 16, and 18-22, which depend upon claim 12, and claims 24-25, 27, and 29-33, which depend upon claim 23, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

By   <u>_[signature]_</u>

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